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Letter to the Editor

In Reference to *Inferior Meatus Augmentation Procedure (IMAP) for Treatment of Empty Nose Syndrome*

Dear Editor,

I read the interesting paper "Inferior meatus augmentation procedure (IMAP) for treatment of empty nose syndrome" by Chang MT et al.[1] and, based on 12 years of experience with cartilage for the treatment of empty nose syndrome, I think some recommendations can be added to optimize the attempt to replace the missing tissue of the inferior turbinate: (1) we should keep in mind that the term empty nose syndrome describes a variety of conditions that can follow total turbinate excision or lesser procedures; therefore, the surgical technique should be individualized and adapted to anatomy of the residual inferior turbinate, degree of atrophy of the mucosal layer, and results of the cotton test; (2) elevating the inferior meatal pocket can be difficult in case of atrophic mucosal layer; in such a case, chemically assisted dissection[2] can help to maintain the correct cleavage plane and to preserve the mucosal layer intact: mesna is administered in the cleavage plane by means of specifically designed dissectors that deliver a 10% mesna solution directly at the tip of the instruments; (3) the cartilage we use is harvested from the costochondral region of young donors whose tissues and organs have been designated for tissue and organ donation[3]; in our hands, this is an excellent material because of its elasticity that rarely traumatizes the mucosal layer and because of the low extrusion rate (no case of extrusion in the last 100 cases); (4) the procedure can be performed using standard microscope for otologic surgery, with magnification between ×6 and ×10 and 300 mm working distance: this allows to easily insert the fashioned graft in the inferior meatal pocket, without the need for help from the assistant; (5) we commonly prefer to use a series of small cartilage "bricks" with rounded edges instead of half-cylinders, since this improves the integration of the implant material. Typically, every single implant measures 15–25 mm in length, 3–6 mm in height, and 2–5 mm in width.

In conclusion, I would like to thank Chang for describing their excellent technique that is very similar to the one we commonly use. I believe combining their recommendations with the tips I suggested may be useful to the readers and help to optimize the attempt to replace the missing tissue of the inferior turbinate.

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